



storage section, a writing and reading section, and a transport mechanism. The storage section holds a plurality of memory cards. The writing and reading section writes data into and reads data from the memory cards. The transport mechanism moves the storage section or the writing and reading section so that data are written into and read from the memories in the memory card. The transport mechanism is driven, removing a selected card from the storage section, and the data are read from or written into the card selected. The storage section allows a part of the label on the memory card to be seen from the exterior and read when the card is held in the storage section—

AUG 1 5 2002

## IN THE CLAIMS

Technology Center 2100

Please amend claims 1-45 by rewriting same to read as follows:

--1. (Amended) An apparatus for recording data in and reproducing the data from a plurality of memory cards used as recording media, each of the plurality of memory cards shaped like a plate and incorporating a memory, the apparatus comprising:

storage means provided in a main body of the apparatus for storing the plurality of memory cards, wherein each of the plurality of memory cards has a label and is positioned such that a part of the label is visible from outside the apparatus; and

transmitting and receiving means for transmitting the data to and receiving data from each of the plurality of memory cards stored in the storage means.

--2. (Amended) An apparatus for recording data in and reproducing the data from a plurality of memory cards used as recording media, each of the plurality of memory cards shaped like a plate and incorporating a memory, the apparatus comprising:

a storage section configured to store the plurality of memory cards;

a writing and reading section configured to write the data to and read the data from each of the plurality of memory cards stored in the storage section; and

transport means for moving the storage section and the writing and reading section relative to each other to set the writing and reading section at a position where the data are written into and read from the memory cards stored in the storage section.

--3. (Amended) An apparatus for recording data in and reproducing the data from a plurality of memory cards used as recording media, each of the plurality of memory cards shaped like a plate and incorporating a memory, the apparatus comprising:

a plurality of storage means provided on a surface of a main body of the apparatus for storing the plurality of memory



cards wherein each of the plurality of memory cards has a label and is positioned such that a part of the label is visible from outside the apparatus; and

transmitting and receiving means provided in each of the plurality of storage means and configured to transmit the data from and receive the data to the plurality of memory cards stored in each of the plurality of storage means.

--4. (Amended) The apparatus according to claim 3, further comprising:

transport means for moving each of the plurality of storage means between an insertion and removal position where each of the plurality of memory cards are inserted into and removed from the plurality of storage means and a writing and reading position where the data are written into and read from the plurality of memory cards; and

a plurality of grooves made in a surface of the main body of the apparatus for receiving the plurality of storage means respectively moved by the transport means.

--5. (Amended) The apparatus according to claim 4, further comprising:

holding means having a holding member and a cam section and configured to hold the plurality of memory cards stored in the plurality of storage means, wherein the holding member is designed to rotate between a support position where the holding member supports the plurality of memory cards and a

non-support position where the holding member does not support the plurality of memory cards; and the cam section is provided on the main body of the apparatus and designed to rotate the holding member to the support position when the storage means moves to the writing and reading position.

- --6. (Amended) The apparatus according to claim 5, wherein: each of the plurality of memory cards is a substantially rectangular plate and has a terminal at an end for transmitting and receiving the data; each of the plurality of storage means that is set in the groove and that is able to move has the transmitting and receiving means located at an end; an insertion quide section having an inclined surface is provided at an other end of each of the plurality of storage means; a memory card inserted into the storage means is guided by the inclined surface of the insertion guide means and the terminal at the end is connected to the transmitting and receiving means; and the storage means is moved with the memory card from the insertion and removal position to the writing and reading position as the memory card is further inserted until the memory card is completely held in the storage means.
- --7. (Amended) The apparatus according to claim 3, wherein the plurality of storage means are arranged in a matrix pattern.



--8. (Amended) The apparatus according to claim 3, wherein the plurality of storage means stores the plurality of memory cards in staggered fashion such that each memory card does not cover the label on a memory card located immediately below.

 $(-2\pi i)^{-1} = \frac{1}{2\pi i} \left( 2\pi i \right)^{2}$ 

· Land and The Control Contro

- --9. (Amended) The apparatus according to claim 8, wherein a stepwise groove is made in a surface of the main body and has steps for holding the transmitting and receiving means at an end and having an inclined part at an other end, each step holding one storage means; and the memory card inserted into the storage means held in a lowest stage of the stepwise groove is guided along the inclined part to connect the terminal of the memory card to the transmitting and receiving means.
- --10. (Amended) The apparatus according to claim 3, further comprising control means for controlling reading means provided in a memory card connected to the transmitting and receiving means of any of the plurality of storage means, thereby causing the reading means to access an address in the memory incorporated in the memory card in accordance with a user's instruction to read data stored at the address provided in the memory.
- --11. (Amended) The apparatus according to claim 10, wherein the control means controls writing means provided in



the memory card connected to the transmitting and receiving means of any of the plurality of storage means, thereby causing the writing means to access the address in the memory incorporated in the memory card in accordance with the user's instruction to write the data at the address provided in the memory.

attention of the section of the second

--12. (Amended) The apparatus according to claim 11, wherein the control means transfers a command and an address in the memory to the memory card via the transmitting and receiving means in accordance with the user's instruction, the command designating one of the reading of the data from and writing of the data into the memory and the address being one at which the reading and writing of data is initiated.



- --13. (Amended) The apparatus according to claim 12, wherein detecting means is provided to detect the memory cards stored in said plurality of storage means; setting means is provided to set an order in which the memory cards are subjected to data reproduction; and the control means controls the memory cards such that the memory cards are accessed in the order set by the setting means to read the data from the memory cards.
- --14. (Amended) The apparatus according to claim 13, wherein: data-source designating means is provided to designate one of the plurality of memory cards stored in the

plurality of storage means from which the data are transmitted and to designate a track stored in the memory provided in the memory card designated; data-destination designating means is provided to designate an other of the plurality of memory cards stored in the plurality of storage means to which the data are transmitted; and the control means controls the memory cards such that the track is read from the memory incorporated in the memory card designated by the data-source designating means and the track is written in a vacant region of the memory incorporated in the memory card designated by the data- destination designating means.

N

--15. (Amended) An apparatus for recording data in and reproducing the data from a plurality of memory cards used as recording media, each of the plurality of memory cards shaped like a plate and incorporating a memory, the apparatus comprising:

a plurality of storage means provided in a main body of the apparatus for storing the plurality of memory cards;

transmitting and receiving means provided at an end of the storage means and configured to transmit the data to and receive the data from each of the plurality of memory cards stored in the

storage means; and

support means supporting the plurality of storage means, allowing the storage means to rotate between an insertion and removal position where each of the plurality of memory cards

are inserted into and removed from the storage means and a storage position where the memory cards are held in the storage means.

na ving tradiquesia

--16. (Amended) The apparatus according to claim 15, wherein each of the plurality of storage means has a recess for holding an end of one of the plurality of memory cards; the transmitting and receiving means has terminals provided in the recess of each of the storage means and electrically connected to terminals of the memory cards to transmit the data to and receive the data from the memory cards; the support means has a plurality of support pins each inserted in a support hole made in a corner of one of the plurality of storage means; and the storage means are mounted on the plurality of support pins and rotate such that major surfaces of the memory cards intersect with the support pins at right angles.



- --17. (Amended) The apparatus according to claim 16, wherein each of the plurality of storage means holds an end of a memory card and a label on the memory card is exposed to an exterior of the apparatus.
- --18. (Amended) The apparatus according to claim 16, wherein: the main body has notches in corners of an upper surface; the memory cards stored in the storage means are held in the notches while the storage means remain at the storage

position; and the memory cards project from the notches and the labels on the memory card are seen from outside when the storage means are rotated to the insertion and removal position.

- --19. (Amended) The apparatus according to claim 16, wherein a tray section is provided to move the storage means from and into the main body; the support pins of the support means are provided on the tray section; the memory cards held in the storage means project from the tray section; and the labels on the memory card are seen from outside when the tray section is ejected and the storage means are rotated to the insertion and removal position.
- --20. (Amended) The apparatus according to claim 15, further comprising control means for controlling reading means provided in a memory card connected to the transmitting and receiving means of any of the plurality of storage means, thereby causing the reading means to access an address in the memory incorporated in the memory card in accordance with a user's instruction to read data stored at the address provided in the memory.
- --21. (Amended) The apparatus according to claim 20, wherein control means controls the writing means provided in a memory card connected to the transmitting and receiving means of any of the plurality of storage means, thereby causing the

writing means to access an address in the memory incorporated in the memory card in accordance with the user's instruction to write the data at the address provided in the memory.

- --22. (Amended) The apparatus according to claim 21, wherein the control means transfers a command and an address in the memory, to the memory card via the transmitting and receiving means in accordance with the user's instruction, the command designating one of the reading of data from and the writing of data into the memory and the address being one at which the reading and writing of data is initiated.
- --23. (Amended) The apparatus according to claim 22, wherein detecting means is provided to detect the memory cards stored in said plurality of storage means, setting means is provided to set the order in which the memory cards should be subjected to data reproduction, and the control means controls the memory cards such that the memory cards are accessed in the order set

by the setting means, thereby to read data from the memory cards.

--24. (Amended) The apparatus according to claim 23, wherein data-source designating means is provided to designate one of the memory cards stored in the storage means, from which data should be transmitted, and to designate a track stored in the memory

provided in the memory card designated, data-destination designating means is provided to designate another of the memory cards stored in the storage means, to which data should be transmitted, and the control means controls the memory cards such that the tracks are read from the memory incorporated in the memory card designated by the data-source designating means and the tracks are written in a vacant region of the memory incorporated in the memory card designated by the data-destination designating means.

--25. (Amended) An apparatus for recording data in and reproducing the data from a plurality of memory cards used as recording media, each of the plurality of memory cards shaped like a plate and incorporating a memory, the apparatus comprising:

storage means having: a receptable configured to hold the plurality of memory cards and having an opening through which each of the plurality of memory cards are inserted and removed; a support plate provided in the receptable to move in the direction in which each of the plurality of memory cards are arranged one above another and configured to support the plurality of memory cards; a bias member biasing the support plate toward the opening; and a stopper section configured to inhibit the support plate biased by the bias member from moving; and

a holding section holding the storage means and having data transmitting and receiving means for transmitting the

data to and receiving the data from a transmitting and receiving section provided at an end of each of the plurality of memory cards.

وكالمطاق والمنطوع والمعاولة والمرادات والمستان والمتابية والمنطوع والمتابية

- --26. (Amended) The apparatus according to claim 25, wherein the receptacle has a transparent window through a side of each of the plurality of memory cards held in the receptacle.
- --27. (Amended) The apparatus according to claim 25, wherein each storage means has a first opening in one surface through which one of the plurality of memory cards is inserted and removed and a second opening continuous with the first opening through which the transmitting and receiving section provided at the end of the memory card is exposed.
- --28. (Amended) The apparatus according to claim 25, wherein each storage means has a first opening in one surface through which one of the plurality of memory cards is inserted and removed and a second opening in an other surface through which the transmitting and receiving section provided at the end of the memory card is exposed.
- --29. (Amended) The apparatus according to claim 25, further comprising a transport mechanism configured to move each storage means between an insertion and removal position where the memory cards are inserted into and removed from the



storage means and a storage position where the plurality of memory cards are held in the storage means.

in the section of the second of

- --30. (Amended) The apparatus according to claim 29, further comprising a cover that opens and closes the holding section as the storage means is moved.
- --31. (Amended) The apparatus according to claim 25, further comprising control means for controlling reading means provided in a memory card connected to the transmitting and receiving means of any storage means, thereby causing the reading means to access an address in the memory incorporated in the memory card in accordance with a user's instruction to read data stored at the address provided in the memory.
- --32. (Amended) The apparatus according to claim 31, wherein the control means controls writing means provided in the memory card connected to the transmitting and receiving means of any storage means, thereby causing the writing means to access an address in the memory incorporated in the memory card in accordance with the user's instruction to write the data at the address provided in the memory.
- --33. (Amended) The apparatus according to claim 32, wherein the control means transfers a command and an address in the memory to the memory card via the transmitting and receiving means in accordance with the user's instruction, the

command designating one of the reading of the data from and writing the data into the memory and the address being one at which the reading and writing of the data is initiated.

a separation for the separation of the second se

--34. (Amended) The apparatus according to claim 33, wherein: detecting means is provided to detect the memory cards stored in the plurality of storage means; setting means is provided to set the order in which the memory cards are subjected to data reproduction; and the control means controls the memory cards such that the memory cards are accessed in the order set by the setting means to read data from the memory cards.



--35. (Amended) The apparatus according to claim 34, wherein: data-source designating means is provided to designate one of the memory cards stored in the storage means from which data are transmitted and to designate a track stored in the memory provided in the memory card designated; data- destination designating means is provided to designate an other of the memory cards stored in the storage means to which data are transmitted; and the control means controls the memory cards such that the tracks are read from the memory incorporated in the memory card designated by the data-source designating means and the tracks are written in a vacant region of the memory incorporated in the memory card designating means.

--36. (Amended) An apparatus for recording data in and reproducing the data from a plurality of memory cards used as recording media, each of the plurality of memory cards shaped like a plate and incorporating a memory, said apparatus comprising:

a plurality of holders configured to hold the plurality of memory cards respectively;

a holding section in which the plurality of holders are provided to hold the plurality of memory cards;

a writing and reading section configured to write data into and read the data from the plurality of memory cards held by the plurality of holders; and

transport means for moving one of the holding section and the writing and reading section such that one of the plurality of memory cards held in one of the plurality of holders opposes the writing and reading section.

--37. (Amended) The apparatus according to claim 36, wherein the holding section holds each of the plurality of holders one above an other in a direction that intersects at right angles with major surfaces of the plurality of memory cards held in the plurality of holders; and the transport means moves one of the holding section and the writing and reading section in the direction the holders are held one above another to cause the memory card held in one holder to oppose the writing and reading section.



--38. (Amended) The apparatus according to claim 37, wherein the writing and reading section has a recess for holding an end of the memory card held in the holder and connection terminals provided in the recess to contact the terminals provided at an inserted end of the memory card and transport means is provided to move the holder toward one of the writing and reading section and the writing and reading section toward the holder to insert the end of the memory card into the recess of the writing/reading section and to connect the terminals at one end of the memory card to the connection terminals.



- --39. (Amended) The apparatus according to claim 38, further comprising ejecting means for ejecting one of the plurality of holders from the holding section.
- --40. (Amended) The apparatus according to claim 38, wherein: a transmitting and receiving section is provided at an end of each memory card for transmitting the data to and receiving the data from the writing and reading section; the holding section has a plurality of grooves arranged in a circumferential direction, the grooves serving as the holders and holding the memory cards such that the receiving and transmitting sections lie near an inner periphery and the major surfaces of the memory cards oppose one another; the receiving and transmitting section of each memory card is located at a center part of the holding section; and the

transport means rotates one of the holding means and the writing and reading section to cause the memory card held in one groove to oppose the writing and reading section.

--41. (Amended) The apparatus according to claim 36, further comprising control means for controlling the transport means in accordance

with a user's instruction such that the transport means moves one of the writing and reading section and the memory card held in any of the plurality of holders to cause the memory card to

oppose the writing and reading section, and that writing and reading section accesses an address in the memory incorporated in the memory card to read the data stored at the address provided in the memory.



- --42. (Amended) The apparatus according to claim 41, wherein the control means controls the transport means in accordance with the user's instruction such that the transport means moves one of the writing and reading section and the memory card held in any holder to cause the memory card to oppose the writing and reading section, and that writing and reading section accesses an address in the memory incorporated in the memory card to write data at the address provided in the memory.
  - --43. (Amended) The apparatus according to claim 42,

wherein the control means transfers a command and an address in the memory to the memory card via the writing and reading section in accordance with the user's instruction, the command designating one of the reading of data from and writing into the memory and said address being one at which the reading or writing of data is to be initiated.

--44. (Amended) The apparatus according to claim 43, wherein: detecting means is provided to detect the memory cards stored in a plurality of storage means; setting means is provided to set an order in which the memory cards are subjected to data reproduction; and the control means controls the memory cards such that the memory cards are accessed in the order set by the setting means to read the data from the memory cards.

K

-

--45. (Amended) The apparatus according to claim 44, wherein: data-source designating means is provided to designate one of the plurality of memory cards stored in the holders from which the data are transmitted and to designate a track stored in the memory provided in the memory card designated; data-destination designating means is provided to designate an other of the plurality of memory cards stored in the holders to which data are transmitted; and the control means controls the writing and reading section such that the tracks are read from the memory incorporated in the memory card designated by the data-source designating means and the